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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/692,823 | 10/27/2003 | Tatsuya Fukunaga | 117599 | 9665 |
| 25944 | 7590 | 03/08/2006 | EXAMINER | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | LEE, BENNY T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2817 | |

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

| | | | | |
|------------------------------|------------------------|--|---------------------|--|
| Office Action Summary | Application No. | | Applicant(s) | |
| | 10/692,823 | | FUKUNAGA, TATSUYA | |
| | Examiner | | Art Unit | |
| | Benny Lee | | 2817 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2 and 4-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 4-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner. + 14 Dec
- 10) ☒ The drawing(s) filed on 27 October 2003 & 11 July 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19 December 2005 has been entered.

The disclosure is objected to because of the following informalities which pertain to the approved substitute specification of 11 July 2005: In paragraph [0047], 9th line therein, and paragraph [0048], second line therein, note that "Figs. 2 and 3" should be rewritten as --Figs. 1 and 2-- for a proper characterization. For the specification's description of each drawing figure, note that all reference labels therein should be correspondingly described relative to that figure's specification description. For the description of multiple figures (e.g. figs. 1-3, 15, 16A, 16B, 16C, 17, etc) the reference labels therein should be reference to those drawing figures in which they actually appear (unless they appear in each one of the multiple figures). The examiner suggests that if applicants' make the following insert, most of the objections raised herein would be resolved: at page 7, line 2, after "drawings" inserted should be --, where like features appearing in different drawing figures are denoted by like reference numerals and may not be described in detail for all drawing figures in which they appear--. However, if a reference feature is unique to a particular figure, it should be explicitly reference such drawing figure in the specification description. Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the first waveguide having the line shape conductor and ground electrode with the line conductor directly connected to one of the

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ground electrodes of the second waveguide must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification lacks a specific description of the first waveguide having a line shaped conductor and a ground plane, where the line conductor is directly connected to the one of the ground electrodes of the second waveguide as presented in amended claim 1.

Claims 1, 2, 4-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, note that the amended limitation of the "first waveguide" being further defined as "having a ground electrode and a line shaped conductor portion" does not find support in the original disclosure, and thus has been treated as "new matter".

Similarly in claims 1, 4, 5, the amended limitation of the “line shaped conductor portion” being “directly conductively connected” to “one of the ground electrodes of the second waveguide” does not find support in the original disclosure and thus has been treated as “new matter”.

It should be noted that the original disclosure appears to recite that it is the “first waveguide” (in general) which is connected to the “second waveguide” rather than the more specific “line shape conductor portion” which is “directly connected” to the ground electrode of the “second waveguide”, as amended, and accordingly that is why the “new matter” issue has been raised.

However, if applicants’ do not believe the above noted limitation are indeed “new matter”, then an appropriate explanation is required, including pointing out where explicit support for the amended limitations can be found in the original disclosure.

Claims 1, 2, 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, note that the added recitations “from an upper side or lower side of the stacking direction side” & “in a plane containing the connecting window” are vague in meaning. Clarification is needed. Also, note that the amended recitation “the one of the ground electrodes of the second waveguide having the connecting window” appears to be a redundant or otherwise an unnecessary recitation since the location of the “window” appears to have been defined at earlier locations in the claim. Clarification is needed.

In claims 4, 5, note that it is unclear whether the “line pattern of the first waveguide” being “conductively connected to the ground electrode between neighboring propagation regions of the second waveguide” is properly dependent from the limitation recited in claim 1, (from which these claims ultimately depend) where the “line pattern” is connected to “one of the ground electrodes of the second waveguide”. Clarification is needed.

The following claims have been found objectionable for reasons set forth below:

In claim 1, line 9, note that --at least two-- should precede “ground electrodes” for a proper characterization.

In claim 4, line 3, note that “has” should be rewritten as --defines-- for an appropriate characterization; last line, note that “region” should correctly be --regions--.

In view of the “new matter” rejection, set forth above, the examiner has withdrawn the prior art rejections. Upon the resolution the “new matter” issues raised above, the examiner may reintroduce appropriate prior art rejections.

Applicant's arguments with respect to claims 1, 2, 4-6 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.



BENNY T. LEE
PRIMARY EXAMINER
ART UNIT 2817

B. Lee